
PSYC 369	Sensation & Perception	Fall 2019
Instructor:	Dr. Mark Holden	Lecture Location: MFH 164
Phone:	403-210-9552	Lecture Days/Time: MWF 11:00 – 11:50
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Office Hours:	TBA	

Course Description

This course is an introduction to empirical, computational, and theoretical approaches to the study of sensation and perception. The course covers both the physiological and psychological bases of sensory and perceptual processes, including vision, audition, taste, smell, touch, proprioception, and basic psychophysics. Provides a background for advanced courses in sensory and perceptual processing, human factors, and environmental psychology.

Course Format

Instruction in this course will make use of a variety of techniques, including lectures, demonstrations, audio-visual presentations, discussions, readings, classroom problems, and (maybe) the occasional guest speaker. I outline these techniques below. As you read, I will ask you to notice that there are a number of activities in which I expect students to be **active participants** in the learning process. Research shows that this type of participation improves learning and retention of material, and – anecdotally – it makes classes a lot more fun, too!

Lectures: formal lectures will expand upon and emphasize key points from the readings. These lectures may be the primary method of instruction, but they are by no means the only method.

Demonstrations: demonstrations are common in my courses, and they often are used to highlight or emphasize concepts, methods, or techniques. Some demonstrations require the assistance of a single, brave volunteer while others may include the entire class. The key point is that students are expected to be active participants in the learning process.

Audio-Visual Presentations: sometimes a picture can be worth a thousand words. And a video might be worth millions. Research has shown that carefully-selected videos can make material much more memorable.

Discussions: we will occasionally engage in small- or large-group discussions in this course. This method is used more often in my later courses, but please be prepared to make friends with the person next to you!

Readings: the textbook is an excellent resource for this course, and students are expected to keep up with the assigned readings. That said, lectures do expand on the readings so I would not expect to do well by reading the book alone and not attending class.

Classroom Problems: I occasionally give students sample problems in class. Students are expected to try to solve the problem in pairs or in small groups. We will then go over the answers as a class. Although you might be tempted to not bother trying to answer (and just write down the correct answer later), research strongly suggests that your learning will be better for the effort – even if you don’t solve the problem the first time!

Guest Speakers: I occasionally invite guest speakers to class, if they have a unique and valuable perspective on some aspect of the course material.

Course Website

The course website is on D2L at <https://d2l.ucalgary.ca>

It is on this website that you will find important announcements, download lecture slides, hand in assignments, and find links to other resources (as necessary). Please check it often.

Course Learning Outcomes

The Department of Psychology is committed to student knowledge and skill development. The table below lists the key learning outcomes for this course, the program-learning outcomes they facilitate (see psyc.ucalgary.ca/undergraduate/program-learning-outcomes), and the expected level of achievement.

Course Learning Outcomes	Assessment Methods	PLO(s)	Level(s)
Summarize and apply the basic concepts, and theories of perception. This includes using terminology correctly, and identifying and applying relevant theories to explain various phenomena, behaviors, illusions, and perceptual processes.	Exams, assignments	1, 5, 7	C
Describe the contributions of important figures, research programs, and theories in the history of research in sensation and perception, and link major historical events in the history of the field with contemporary issues or research questions.	Exams, assignments	1, 2, 7	I
Identify, evaluate, and apply relevant theories/research/concepts of sensation & perception to explain (or develop plausible potential explanations) for various phenomena – from empirical findings, to everyday behaviors, to issues of social and societal importance.	Exams, assignments	1, 2, 5, 7	C
Accurately summarize research, and interpret both simple and complex graphs in the context of statistical significance	Exams, assignments	3, 4, 5	C
Describe historical and modern research methods used in studying sensation & perception, as well as their advantages and disadvantages. Correctly identify situations in which one method might be preferred over another	Exams, assignments	1, 2, 4, 5, 7	C
Communicate research findings and ideas effectively, using clear and concise arguments – backed up by figures, graphs, and tables (when necessary). Disregard or challenge flawed sources of information or reasoning.	Assignments	2, 3, 4, 5	C

Notes. PLOs = Program-Learning Outcomes: 1 = demonstrate knowledge of psychological sciences, 2 = think critically and solve problems, 3 = conduct research and analyze data, 4 = communicate effectively, 5 = demonstrate information literacy, 6 = understand and implement ethical principles, 7 = apply psychological knowledge and skills. Level of PLO achievement facilitated by this course: I = introductory, C = competency, A = advanced.

Prerequisites

Psyc 200 and 201 – Principles of Psychology I and II

Required Text

Goldstein, E.B. & Brockmole, J. (2016). *Sensation and Perception* (10th ed.). Boston, MA: Cengage.

Available in the Campus Bookstore.

Classroom Expectations

Sensation & Perception is frequently a medium-large course, no matter the university. In general, with this many students in one room, there can be a fair amount of confusion and noise generated. A few simple guidelines will help to keep the confusion to a minimum, and provide a reasonably quiet learning environment for *all* students. I have included a set of expectations for both the students as well as for myself, below. In general, these all boil down to one simple rule, though: **I expect us all to be respectful of one another, and for each of us to do our part in making this a safe, comfortable learning environment for everyone.** By creating and maintaining a civil classroom atmosphere – in which members of the class treat each other with mutual respect – we establish a classroom in which attention and energy is focused on teaching and learning, rather than on frustration, conflict, and distrust.

Expectations of Students

- **To be punctual, prepared, and attentive during class**
 - Lecture will start at 11:00 a.m. Please be sure to be in your seat and ready for class by this time. If you absolutely cannot avoid being late, please enter the room as quietly as possible and minimize the disruption for your fellow students. If necessary, sit in the first available seat and try to find your friends at the break.
- **To stay in class (and not begin packing bags) until dismissed**
 - Please refrain from packing up as I begin to wind down a class. Oftentimes, at the end of class I have an important announcement about readings to be omitted, assignment deadlines, and so on. Packing up, or shuffling up and down the aisles causes a great deal of distraction, and may result in you or your fellow students missing these important announcements.
- **To make every effort not to be a distraction to students around you**
 - In some cases, students are not even aware of how distracting certain activities are. Obvious examples include talking on a cell phone, or with a neighbor. Less obvious examples include texting, or checking social media on one's laptop. These are incredibly distracting behaviors for everyone behind or near you. Please refrain from doing so until the break. Also, I would request that cell phones be turned off during class lecture (except at breaks).
- **To be willing to participate positively and constructively during class**

- As outlined above, active participation is a critical component to my teaching style, and improves student learning and retention of material. Acting bored or dismissive is disrespectful to both the instructor and to your fellow students.
- **To treat all other students in the class, as well as the instructor, with respect**
 - We are very lucky to have a diverse population of students at the U of C, who come from different backgrounds and bring different experiences with them. These differences are a valuable means by which we will learn about individual and group differences. I will insist that all of us treat those students who are willing to share their thoughts and experiences with our full respect and attention. Avoid disrespectful comments, tones of voice, or facial expressions.
- **To understand and abide by the procedures and regulations outlined in the syllabus**

Expectations of the Instructor

- **To be punctual, prepared, and enthusiastic during class to facilitate student learning**
 - As I mentioned in the opening note on the syllabus, I love this course. I will always come to class prepared and happy to be teaching you.
- **To treat all students with dignity, respect, and fairness in order to provide a class structure that encourages learning**
 - Teachers who are disrespectful to students need to find another occupation. Seriously. A proper learning environment is one in which students feel safe to share their thoughts, experiences, or questions. Therefore, I have always treated my students with dignity, respect, and fairness. I do not play favorites, and I *never* belittle my students. I know that it is a bit daunting to raise your hand and share your personal experiences in class. As such, I hold *all* my students in high esteem, regardless of how well they perform in my classes, and I try my best to communicate this to them through both my words and my actions.
- **To grade objectively, consistently, and to return grades in a timely manner**
 - Again, I do not play favorites. In an attempt to keep marking from being subjective, all written materials are marked using a rubric (grading scheme) which is applied fairly and consistently to all students. The grading time may vary with time of year and the type of assignment. However, you will always have your assignment grades returned in as timely a manner as possible.
- **To be genuinely concerned about and interested in student learning and performance, and to be sensitive to student needs or concerns**
 - I always want my students to succeed. I do not provide “easy bonus marks” but I will readily try to help any student with *any* aspect of the course that they are struggling to understand. If special circumstances arise that might adversely affect your course performance, please let me know as soon as possible. I can’t help if I don’t know about it.
- **To understand and abide by the procedures and regulations outlined in the syllabus**

Asking Questions During Class

Asking questions during lecture is an extremely important part of learning. I strongly encourage you to ask a question whenever you require clarification on an issue, or have an observation to make yourself. Sometimes, though, we may have so many questions or comments on a particular topic that I will need to limit the amount of time we spend on that topic, so that we can cover the required material. If this is the case, please make sure to either send your question via e-mail, or use the “question box” provided.

Note: Routine questions such as “Where is the exam?” or “What chapters are covered for the midterm?” (and so on) may already be addressed on the course website and are listed in the tentative Lecture Schedule.

Assessment Methods

Midterm Exam 1 (28.33%)

*Covers all class material from Sept 5 – Oct 10
including the relevant textbook material (tentatively Chapters 1-5)
50 points, multiple choice exam*

October 11th, 2019

Midterm Exam 2 (28.33%)

*Covers all class material from Oct 12 – Nov 7
including the relevant textbook material (tentatively Chapters 6-10)
50 points, multiple choice exam*

November 8th, 2019

Final Exam (28.33%)

*Covers material after Nov 9
including the relevant textbook material (tentatively Chapters 11-15)
50 points, multiple choice exam*

To be scheduled by the Registrar

Written Assignments (15%)

Several short (2-3 page) written assignments will be due during the course of the semester. For more information, please see below

Extra Information about Exams:

The use of computers, iPads, phones, graphing calculators, or any other programmable technology is NOT permitted during the exams.

Study aids (e.g. books or notes) are also NOT permitted during exams.

Extra Information about Lab Assignments:

There will be 5 short-answer written assignments through the semester. These assignments will help us to explore the nature of perception, to answer basic questions about sensory systems, to help clarify concepts that sometimes give students trouble, and to explore material even beyond the classroom. The 5 assignments will count equally toward the 15% “assignments” component of your final grade.

You will be graded primarily on the content of your responses (e.g. were the interpretations of the data correct), as well as your communication – including the correct use of relevant terminology. You will not be required to use APA style in these assignments.

Assignments are due by 11:59 pm on the date indicated on the schedule.

All assignments will be handed in online, and **MUST** be handed in to the appropriate D2L dropbox folder.

Without approved documentation, late assignments will receive a penalty of 20% per day late (including weekend days), up to a maximum of 4 days late. After this, they will receive 0 points.

Due dates for the assignments may be found below, included in the Lecture Schedule.

Course Credits for Research Participation (Max 2% of final grade)

Students in most psychology courses are eligible to participate in Departmentally approved research and earn credits toward their final grades. **A maximum of two credits (2%) per course, including this course, may be applied to the student's final grade. Students earn 0.5% (0.5 credits) for each full 30 minutes of participation.** The demand for timeslots may exceed the supply in a given term. Thus, students are not guaranteed that there will be enough studies available to them to meet their credit requirements. Students should seek studies early in the term and should frequently check for open timeslots. Students can create an account and participate in Departmentally approved research studies at <http://ucalgary.sona-systems.com>. The last day to participate in studies and to assign or reassign earned credits to courses is **Dec 6, 2019**.

Department of Psychology Criteria for Letter Grades

Psychology professors use the following criteria when assigning letter grades:

A+ grade: *Exceptional Performance.* An A+ grade indicates near perfect performance on multiple choice and short answer exams. For research papers/essays/course projects/presentations, an A+ grade is awarded for exceptional work deserving of special recognition and is therefore not a common grade.

A, A- Range: *Excellent Performance.* Superior understanding of course material. Written work is very strong in terms of critical and original thinking, content, organization, and the expression of ideas, and demonstrates student's thorough knowledge of subject matter.

B Range: *Good Performance.* Above average understanding of course material. Written work shows evidence of critical thinking and attention to organization and editing but could be improved in form and/or content.

C Range: *Satisfactory Performance.* Adequate understanding of course material. Knowledge of basic concepts and terminology is demonstrated. Written work is satisfactory and meets essential requirements but could be improved significantly in form and content. Note: All prerequisites for courses offered by the Faculty of Arts must be met with a minimum grade of C-.

D range: *Marginally meets standards.* Minimal understanding of subject matter. Written work is marginally acceptable and meets basic requirements but requires substantial improvements in form and content. Student has not mastered course material at a level sufficient for advancement into more senior courses in the same or related subjects.

F grade: *Course standards not met.* Inadequate understanding of subject matter. Written work does not meet basic requirements. Student has not demonstrated knowledge of course material at a level sufficient for course credit.

Grading Scale

A+	96-100%	B+	80-84%	C+	67-71%	D+	54-58%
A	90-95%	B	76-79%	C	63-66%	D	50-53%
A-	85-89%	B-	72-75%	C-	59-62%	F	0-49%

As stated in the University Calendar, it is at the instructor’s discretion to round off either upward or downward to determine a final grade when the average of term work and final examinations is between two letter grades.

To determine final letter grades, final percentage grades will be rounded up or down to the nearest whole percentage (e.g., 89.5% will be rounded up to 90% = A but 89.4% will be rounded down to 89% = A-).

Tentative Lecture Schedule

Topics will be covered in the following order during the year. **Approximate** lecture dates are given, but the timing may be adjusted if more (or less) time is needed on a particular topic. Due dates for all assignments may be found below as well.

Date	Topic	Chapter Reading	Assignment
F Sep 6	<i>University Lectures begin.</i> Introduction & Welcome to Psyc 369	Course Outline	
M Sep 9	Introduction to Perception	Chapter 1	
W Sep 11			
R Sep 12	<i>Last day to drop a class without a penalty</i>		
F Sep 13	Introduction to Perception cont’d <i>Last day to add or swap a course</i>	Chapter 1 cont’d	
M Sep 16	Beginnings of Perception <i>Fee payment deadline for Fall Term full and half courses.</i>	Chapter 2	
W Sep 18			
F Sep 20			
M Sep 23	Neural Processing and Perception	Chapter 3	Assignment 1
W Sep 25			
F Sep 27			
M Sep 30	Cortical Organization	Chapter 4	
W Oct 2	Perceiving Objects & Scenes (Bottom-Up and Top-Down Perception)	Chapter 5	Assignment 2
F Oct 4			

M Oct 7			
W Oct 9			
F Oct 11 Midterm 1 (28.33%)			
M Oct 14	Thanksgiving Day, University closed (except Taylor Family Digital Library, Law, Medical, Gallagher and Business Libraries). No lectures.		
W Oct 16	Perceiving Colour	Chapter 9	
F Oct 18			Assignment 3
M Oct 21			
W Oct 23	Perceiving Depth & Size	Chapter 10	
F Oct 25			
M Oct 28			
W Oct 30	Perceiving Motion	Chapter 8	
F Nov 1	Perceiving Motion/Taking Action	Chapter 7	Assignment 4
M Nov 4	Visual Attention	Chapter 6	
W Nov 6			
F Nov 8 Midterm 2 (28.33%)			
Nov 10-16	Term Break No Classes		
M Nov 11	Remembrance Day (Observed). University Closed (except Taylor Family Digital Library, Law, Medical, Gallagher and Business Libraries). No lectures.		
M Nov 18	Hearing	Chapter 11	
W Nov 20			
F Nov 22	Auditory Localization & Auditory Scenes	Chapter 12	
M Nov 25			
W Nov 27			
F Nov 29	Perceiving Speech	Chapter 13	Assignment 5
M Dec 2	Cutaneous & Body Senses	Chapter 14	
W Dec 4	Cutaneous & Body Senses/Chemical Senses	Chapter 14/15	
F Dec 6	Chemical Senses <i>Fall Term Lectures End. Last day to withdraw with permission from Fall Term half courses.</i>	Chapter 15	
Dec 9-19 Fall Final Exam Period			

Reappraisal of Graded Term Work <http://www.ucalgary.ca/pubs/calendar/current/i-2.html>

A student who feels that a piece of graded term work (term paper, essay, test, etc.) has been unfairly graded, may have the work reappraised as follows. The student shall discuss the work with the instructor **within ten business days** of being notified about the mark or of the item's return to the class. If not satisfied, the student shall take the matter to the head of the department offering the course **within 2 business days of receiving the decision from the instructor**, who will arrange for a reappraisal of the work **within the next ten business days**. The reappraisal will only be considered if the student provides a detailed rationale that outlines where and for what reason an error is suspected. Students in faculties without a departmental structure should take the matter to the dean, or designate, of the

faculty offering the course. The result of that reappraisal will be given to the student in writing along with information about appealing the reappraisal.

The reappraisal of graded term work may cause the grade to be raised, lowered or to remain the same. There is no limit to the number of pieces of graded work that a student may request be reappraised, however a single piece of work may only be reappraised once.

Reappraisal of Final Grade <http://www.ucalgary.ca/pubs/calendar/current/i-3.html>

In the reappraisal of a final grade, the only element that will be considered is the grading of the final assessment that makes up the final mark (e.g., final examination, final project, final paper). An exception may occur when the Instructor of Record evaluates a piece of graded term work at the end of the term; that grade may also be considered in a reappraisal of final grade.

A student seeking a reappraisal of a final grade should first attempt to review the final assessment with the department or faculty offering the course. After which, the student shall obtain a Reappraisal of Final Grade form from ucalgary.ca/registrar (under Student Forms). The student must indicate exactly what error was made in marking the final assessment and/or in computing the final grade. The reappraisal will only be considered if the student provides a detailed rationale that outlines where and for what reason an error is suspected.

Students requesting a reappraisal of a final grade must submit their request by the following dates:

Fall Term – March 1

Winter Term – June 30

Spring Intersession – August 15

Summer Term – October 15

Supplemental Examinations: 30 calendar days from the date the examination was written

For information relating to Law, Veterinary Medicine and the Cumming School of Medicine (MD) courses, please refer to the faculty section.

The reappraisal form shall be submitted to Enrolment Services who will forward it to the department head or dean of the faculty offering the course. Reappraisals of final grades are dealt with by the head of the academic unit in consultation with members of academic staff. Normally, the department/faculty will respond to a reappraisal request within thirty calendar days of its initiation. After the reappraisal is completed, the department shall return the form to the Registrar's Office who shall inform the student in writing of the decision.

Students should be aware that the grade being reappraised may be raised, lowered or remain the same. A student may request a reappraisal of final for a maximum of two courses in one academic year (September 1 – August 31).

Plagiarism and Other Academic Misconduct

Intellectual honesty is the cornerstone of the development and acquisition of knowledge and requires that the contribution of others be acknowledged. Consequently, plagiarism or cheating on any assignment

is regarded as an extremely serious academic offense. Plagiarism involves submitting or presenting work in a course as if it were the student's own work done expressly for that particular course when, in fact, it is not. Students should examine sections of the University Calendar that present a Statement of Intellectual honesty and definitions and penalties associated with Plagiarism/Cheating/Other Academic Misconduct.

Academic Accommodations

The student accommodation policy can be found at: ucalgary.ca/access/accommodations/policy. Students needing an Accommodation because of a Disability or medical condition should communicate this need to Student Accessibility Services in accordance with the Procedure for Accommodations for Students with Disabilities ucalgary.ca/policies/files/policies/student-accommodation-policy. Students needing an Accommodation based on a Protected Ground other than Disability, should communicate this need, preferably in writing, to the instructor.

Seating During Exams

Instructors and exam invigilators are free to ask students to move seats before an exam begins or even during an exam. Students must comply with this request and refusal to do so may warrant a charge of academic misconduct.

Absence From A Test/Exam

Makeup tests/exams are **NOT** an option without the approval of the instructor. A student may be asked to provide supporting documentation for an exemption/special request for a make-up exam <https://www.ucalgary.ca/pubs/calendar/current/n-1.html>. Students who miss a test/exam have up to **48 hours** to contact the instructor to ask for a makeup test/exam. It's the instructor's discretion if they will allow a make-up exam. **Students who do not schedule a makeup test/exam with the instructor within this 48-hour period forfeit the right to a makeup test/exam.** At the instructor's discretion, a makeup test/exam may differ significantly (in form and/or content) from a regularly scheduled test/exam. Once approved by the instructor a makeup test/exam must be written within 2 weeks of the missed test/exam during exam make-up hours provided by the department <http://psychology.ucalgary.ca/undergraduate/exam-and-course-information#mues>.

If a student cannot write their final exam on the date assigned by the Registrar's Office, they need to apply for a deferred exam <https://www.ucalgary.ca/registrar/exams/deferred-exams>.

Travel During Exams

Consistent with University regulations, students are expected to be available to write scheduled exams at any time during the official December and April examination periods. Requests to write a make-up exam because of conflicting travel plans (e.g., flight bookings) will NOT be considered by the department. Students are advised to wait until the final examination schedule is posted before making any travel arrangements. **If a student cannot write their final exam on the date assigned by the Registrar's Office, they need to apply for a deferred exam** <https://www.ucalgary.ca/registrar/exams/deferred-exams>. **Students with an exceptional extenuating**

circumstance (e.g., a family emergency) should contact the Department of Psychology (psyugrd@ucalgary.ca).

Freedom of Information and Protection of Privacy (FOIP) Act

The FOIP legislation disallows the practice of having student's retrieve tests and assignments from a public place. Therefore, tests and assignments may be returned to students during class/lab, or during office hours, or will be made available only for viewing during exam review sessions scheduled by the Department. Tests and assignments will be shredded after one year. Instructors should take care to not link students' names with their grades, UCIDs, or other FOIP-sensitive information.

Acknowledgments and Respect for Diversity

Our classrooms view diversity of identity as a strength and resource. Your experiences and different perspectives are encouraged and add to a rich learning environment that fosters critical thought through respectful discussion and inclusion. The Department of Psychology would also like to acknowledge the traditional territories of the people of the Treaty 7 region in southern Alberta. The City of Calgary is also home to Métis Nation of Alberta, Region III.

Wellness and Mental Health Resources

The University of Calgary recognizes the pivotal role that student mental health plays in physical health, social connectedness and academic success, and aspires to create a caring and supportive campus community where individuals can freely talk about mental health and receive supports when needed. We encourage you to explore the excellent mental health resources available throughout the university community, such as counselling, self-help resources, peer support or skills-building available through the SU Wellness Centre (Room 370, MacEwan Student Centre, <https://www.ucalgary.ca/wellnesscentre/services/mental-health-services>) and the Campus Mental Health Strategy website (<http://www.ucalgary.ca/mentalhealth/>).

Evacuation Assembly Point

In case of an emergency evacuation during class, students must gather at the designated assembly point nearest to the classroom. The list of assembly points is found at <http://www.ucalgary.ca/emergencyplan/assemblypoints>
Please check this website and note the nearest assembly point for this course.

Student Organizations

Psychology students may wish to join the Psychology Undergraduate Students' Association (PSYCHS). They are located in Administration 130 and may be contacted at 403-220-5567.

Student Union VP Academic: Phone: 403-220-3911 suvpaca@ucalgary.ca
Student Union Faculty Rep.: arts1@su.ucalgary.ca

Student Ombudsman's Office

The Office of the Student Ombudsmen provides independent, impartial and confidential support for students who require assistance and advice in addressing issues and concerns related to their academic careers. The office can be reached at 403-220-6420 or ombuds@ucalgary.ca (<http://www.ucalgary.ca/provost/students/ombuds>)

Safewalk

The safewalk program provides volunteers to walk students safely to their destination anywhere on campus. This service is free and available 24 hrs/day, 365 days a year.

Call 403-220-5333.

Important Dates

The last day to drop this course with no “W” notation and **still receive a tuition fee refund** is **Thursday, September 12, 2019**. Last day add/swap a course is **Friday, September 13, 2019**. The last day to withdraw from this course is **Friday, December 6, 2019**.